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The *Journal of Transdisciplinary Peace Praxis* (JTPP) is a peer-reviewed, biannual, scholarly journal of contemplative cutting edge research and practice on subjects related to human social flourishing and peace.

JTPP (https://jtpp.uk), bringing together peace practitioners and academics, fills an important transdisciplinary gap that exists in current academic literature.

JTPP endeavours to support scholarship that highlights

- the human potential for transformation,
- a holistic and collaborative approach to complex systems,
- the transdisciplinary nature of solutions to wicked social problems, and
- a shared sense of purpose in human transnational activism for positive change.

JTPP thus provides a dynamic forum for sharing information and experiences primarily catering to academics, and activists particularly in the disciplines of Peace and Conflict Studies, Political Science, International Relations, Human Rights, History, as well as professionals, policymakers, organisations, institutions and individuals who nurture a firm belief in peace and human rights.

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Editor's Welcome and Introduction

Welcome to the inaugural issue of the *Journal of Transdisciplinary Peace Praxis* (JTPP), a journal of cutting-edge research and practice on subjects related to human social flourishing and peace, published by Frontpage.

I promise that you will not be disappointed as you read this critically important first issue. What you have in front of you is revolutionary—it represents a new, innovative, and collaborative effort to better understand and intervene in real world problems that are often overlooked or disregarded by peace practitioners, the general public, and intellectuals alike.

By expanding the often limited circle of those concerned with peace praxis, our journal endeavours to give voice to wide range of researchers, thinkers, and activists concerned with the current state of our world. In challenging the despondency that we often feel when we reflect on the isolation and disarray of modern social life, the theory and practice outlined in this journal, and specifically this issue, seeks to inspire readers not by mere reference to the modern disintegration of social life, but through celebrating social integration through collaborative creativity and penetrating analysis.

This first issue's focus on the complex transdisciplinary intersections between intentional natural resource management and sustainable peace, presents critical and creative approaches to collaborative systems change. Sustainable natural resource management and global climate change are often narrated to be political hot potatoes. Not only do many not wish to address them head on, many see them as intractable or incommensurable problems to be avoided. This first issue of the JTPP aims to critically interrogate such deficit-based narration by exploring creative policies, practices, and theories that aim to holistically address environmental degradation in the 21st century.

Much more than simple activism for change, what we need is to reconsider the frames and socio-cultural constructions of peaceful environmentally friendly social change. Such an approach is appreciative and asset-based as opposed to depreciative and deficit-centred. Through praxis, considered in these pages as a deep integration of peace theory and practice, peaceful social change can be better understood and, thereby, realised. If there is one thing we know for sure about change, it is that at some point it will come to every system. The question then becomes how can we best position ourselves, as individuals within human society (a complex system), to accept and direct change in positive directions. Wendell Berry once wrote: "Our politics and science have never mastered the fact that people need more than to understand their obligation to one another and to the

earth; they need also the feeling of such obligation, and the feeling can come only within the patterns of familiarity" (Berry, 1989: 88). By helping to shift the narrative about environmental degradation, the articles in this issue of the JTPP, through a transdisciplinary lens, aspire to ignite not just knowledge, but feeling. This process requires critical interrogation of cultural fames, values, and normative orders that have become all-too-familiar patterns in our lives. Better understanding, and feeling, our obligations to future generations, the articles in this issue challenge us to rethink our agency in creating and sustaining positive social change.

JTPP is intentionally transdisciplinary as opposed to simply interdisciplinary in nature. Transdisciplinarity, a term that first appeared in the 1980s (Gehlert, Murry, Sohmer, McClintok, Conzen & Olopade, 2010), refers to an approach to social research and practice in which persons from a range of disciplines and fields attempt to work on shared projects from outside their own separate disciplinary spaces. Transdisciplinarity, like interdisciplinarity, is, by definition, holistic and collaborative, but it also implies an added sense of moving beyond boundaries. This approach is truly science in the service of action (see Kelman, 2015, among others); transdisciplinary, international, and ideal-oriented. Not simply bridging research and practice between traditional disciplines, transdisciplinary praxis implies a sense of moving beyond traditional disciplinary constraints, transcending artificial boundaries, and opening doors to new perceptions, voices, and dialogic practices involving human values. Transdisciplinary praxis is aimed at exploring and developing new approaches to wicked problems (Rittel & Webber, 1973; Matyók & Schmitz, 2014) by integrating an approach to human social science and disavowing any perceived separation between theory and practice. Praxis, in the words of Paulo Freire, is simply the "reflection and action directed at the structures to be transformed" (Freire, 1970: 126). Herbert Kelman called this work "interactive problem solving" (Kelman, 2015: 244) and still others have framed it as "interactive conflict resolution" (Fisher, 1997). In this issue, the structure to be transformed is our most important one—mother earth. Addressing environmental degradation requires collaborative joint-action that takes us beyond any sense of the traditional disciplines and socially constructed boundaries to challenge our deeply held cultural norms.

Hanna Arendt argues that the work of praxis is the highest ideal of human life, indeed it is what makes us human (Arendt, 1958). The realisation of nonviolent peaceful future requires collaborative transdisciplinary approaches to this high ideal of integrating theory and practice. What a future of positive peace also requires is creative and radical interrogation of the values of peaceful coexistence and how they relate to our natural environment. While such work represents a massive collective undertaking, in this initial issue of the JTPP we provide exemplars of this

critical and creative exploration of complex environmental change processes. Each piece in this inaugural issue challenges us to rethink our individual and collective relationship with the natural environment and thus our approaches to changing it for the better. Unmasking the underattended assumptions in the relationship between the natural environment and human conflict, each contribution to JTPP's first issue deserves a close critical reading. In the first piece *Environmental Degradation: Communities Forging a Path Forward*, Sloan and Schmitz foreground the many problems of climate change and environmental degradation while taking an international perspective on how communities in America and Africa have creatively responded. Comparing the different case of the Greenbelt movement in Kenya and the peace process in Somaliland with Standing Rock resistance and strip mining in Appalachian coal country, Sloan and Schmitz provide the outlines of a "transformational model" for building local "bottom-up" relationships for achieving environmental justice. Next, Hale and Pincetl, *Peering through Frames at Conflict and Change*, explore the development of the Los Angeles urban water system. Exposing the frame analysis and path dependency of the city's water infrastructure, Hale and Pincetl not only shift our focus to cities, where more than half the global population resides, but complicate the "nuanced meanings of key concepts" that leaders employ in "urban sociotechnical systems". These initial examples of local analysis and praxis are further muddied by the three pieces that follow, which span an internationally diverse array of cases.

In *Farmers Facing Climate Change in Southern Zambia*, Marcantonio and Bolten probe the local experiences of climate change among smallholder farmers to assess the "response pathways" available to them. The authors of this piece find that community conflict is nurtured by climate uncertainty and that such conflict "is the direct result of vulnerability". Whether the choices of small farmers in Zambia or those of policy makers in Los Angeles, many of the pieces in this inaugural issue articulate environmental vulnerability as not only a simple lack of access to tangible resources, but, rather, a lack of creative choice. Staying in Africa, Kanyako's piece entitled: *Gas Flaring, Environmental Degradation and Community Agitation in West Africa* follows on the themes of a need for human interaction, relationship, and community agency by describing the "failure of the region's gas industry to translate profits into human-centred development". Kanyako's analysis of 'upstream and downstream' implications of West African gas production provides a critical lens for developing a 'people-centred' approach to gas production. Not forgetting the big business interests in the negotiation over the environmental and economic realities of people's lives, Kardashevskaya's article re-opens the critical role for the indigenous women discussed earlier in Sloan and Schmitz's article. Kardashevskaya's *Why Radical Rightful Resistance?* outlines preliminary research in the province of North Sumatra, Indonesia. In arguing that "apart from the

ethics of care" women's participation in local resistance to the paper production industry is influenced by "the gendered experiences as well as the cultural context" of life in Batak Toba, North Sumatra, this paper takes us full circle back to the complex realities of international environmental resistance to corporate power. The remainder of the papers in this first issue focuses primarily on North America, no unimportant player, as home to the largest consumer and polluter nation on earth.

Randall Amster, in his chapter entitled, *Killing Time: Environmental Crimes and the Restoration of the Future*, develops a strong argument for redefining environmental crimes as harms thereby underscoring the culpability of the zero-sum thinking of corporate polluters. Framing the collaboration as ecological in nature, Amster argues that we must "act to maximise the most precious resource of all time." This piece, along with the one by Gwen Hunnicutt entitled *Neoliberal Bio-politics and the Animal Question*, provides sweeping indictments of our anthropomorphic perspective on what it means to create "justpeace" (Schirch, 2001) with our environment in mind. In arguing that "there is a strong link between human and nonhuman animal oppressions, so dismantling of one necessitates the dismantling on the other," Hunnicutt provides a provocative and much needed reassessment of our abuse of animals in the neoliberal context. These two pieces, some of the strongest in this issue, not only nicely frame our core values and assumptions about dealing with environmental degradation, but also make prescient calls for environmental restoration and justice. They also set up nicely the discussion in the final paper by Sandra Engstrom entitled *Recognising the Role Eco-grief Plays in Responding to Environmental Degradation*. Engstrom argues that social workers, and other helping professions, need to "link the research, values and behaviour associated with eco-grief" in developing response to the environmental depletion of our natural world. Relying on E. O. Wilson's (1993) concept of the biophilia—human's innate need to connect with other living organisms—Engstrom argues cogently for the need to process ecological grief as a way to build resilience and advocate for "better sustainable and environmental policies and practices". I chose to leave this piece at the end as a clarion call for all to realise that environmental degradation not only effects one directly through social disintegration and conflict, but psychologically as well through a collective sense of loss and grief.

I hope that you enjoy reading these important articles as much as I did as JTPP's editor. I remain convinced that this journal represents a vital voice of creative collaboration and informed activism. As you turn the pages of this inaugural issue be reassured of the hope for change inherent in our daily choices. Resistance to the dominate narrative of environmental degradation requires consistent vigilance and attention. The narrative frames of neoliberal globalisation and unfettered consumption will not change quickly, but with mindful awareness and a critical transdisciplinary eye towards the "fusion of horizons" (Gadamer, 2011) change will

come nonetheless. I believe that the articles in this inaugural issue of the *Journal of Transdisciplinary Peace Praxis* (JTPP) provide that critical eye and I welcome your feedback and continued support for our shared work.

With metta (loving kindness and compassion),

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REFERENCES

Arendt, Hannah, *The Human Condition*, Chicago, University of Chicago Press, 1958

Berry, Wendell, *The Hidden Wound*, New York, Farrar, Straus & Giroux, 1989

Fisher, Ronald, *Interactive Conflict Resolution,* Syracuse, Syracuse University Press, 1997

Freire, Paulo, *Pedagogy of the Oppressed*, New York, Bloomsbury Academy, 1970

Gadamer, Hans-Georg, *Truth and Method*, New York, Continuum International Publishing Group, 2011

Gehlert, Sarah, Murray, Ann, Sohmer, Dana, McClintock, Martha, Conzen, Suzanne & Olopade, Olufunmilayo, 'The Importance of Transdisciplinary Collaborations for Understanding and Resolving Health Disparities', *Social Work in Public Health*, 25: 3-4, pp.408-422, 2010, DoI: 10.1080/19371910903241124

Kelman, Herbert, 'The Development of Interactive Problem Solving: In John Burton's Footsteps', *Political Psychology*, Vol. 36, No. 2, 2015

Matyók, T. & Schmitz, C. L., 'Deep Analysis: Designing Complexity into Our Understanding of Conflict', *InterAgency Journal* (5) 2, 2014, pp.14-24

Rittel, Horst W. J. & Melvin M. Webber, 'Dilemmas in a General Theory of Planning', *Policy Sciences* 4, No. 2 (June 1973), pp.155-169

Schirch, Lisa, 'Ritual Reconciliation: Transforming Identity/Reframing Conflict' in M. Abu Nimer, (ed.), *Reconciliation, Justice and Coexistence: Theory and Practice*, New York, Lexington Books, 2001

Wilson, E. O., 'Biophilia and the Conservation Ethic' in Kellert, S. R. & E. O. Wilson (eds.) *The Biophilia Hypothesis*, Washington DC, Island Press, 1993

Recognising the Role Eco-grief Plays in Responding to Environmental Degradation

Sandra Engstrom

KEYWORDS
Climate change, eco-grief, social work, place attachment, biophilia

ABSTRACT
This article aims to highlight the importance of a growing need for social work to incorporate the natural environment within research, education and practice. It is becoming imperative that social workers have an understanding of how climate related events, such as environmental degradation and exploitation of natural resources, will impact on the people they work with. Communities worldwide are being affected by changing weather patterns and with constant news coverage available through technology, we are bearing witness to events taking place on a global level. Eco-grief is a term that has been used to describe feelings of helplessness, loss and frustration in an inability to make a difference within these changing times as related to the environment, as well as feelings that may emerge after going through one of these extreme events. This article will aim to link the research, values and behaviour associated with eco-grief with how we can respond to environmental depletion. Included will be a bringing awareness to the importance of social work having a more focused and intentional link to the natural environment in the light of the ever increasing evidence that we are in a period of climate change and the impact that has on communities and individuals. A discussion around encouraging and building positive relationships with the natural world, increasing the capacity to recognise the importance of sustainable livelihoods and ability to protect and care for the natural environment will also be present.

INTRODUCTION

Although I currently live in Scotland, I am from Western Canada; Calgary, Alberta to be exact. As the summer of 2018 progressed, the pictures I would see from that area of the world would consistently have a thick brown and orange haze engulfing the air. At the peak, there were more than 500 fires burning across British Columbia, 15% above the ten-year average (CWFIS, 2018). A state

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of emergency was declared and evacuation orders put in place, processes that are not unfamiliar to the residents of this part of the world as they have dealt with forest fires before, but what was a noticeable change in some of the discourse around the extremity of the situation this time, was grief.

A friend posted the simple phrase 'ecological grief' on social media and what followed was a fascinating discussion by a diverse group of individuals that understood exactly what she meant, they had only never heard of the term before. What became clear from the discussion was that people were looking for a space to be able to acknowledge and process their feelings of grief and loss that were associated with the daily reminders of climate change. The influence that humans and nature have on each other are being researched in a variety of ways and there are many aspects to this relationship that we do not yet understand (Besthorn, 2000; Erickson, 2018; Narhi & Matthies, 2016; Cunsolo Willox et al., 2015; Dominelli, 2012; Crowther, 2018). This article will hopefully contribute to one small aspect of that relationship that could be having bigger consequences than we are fully aware of.

While there have been many advances in technology, medicine and social movements, there is still a long way to go to recognise and mend the relationship that people have with the Earth. Currently that relationship often centres on how to use the resources of the Earth in order to increase economic gain, as opposed to respecting the Earth and its vital role in our overall health and wellbeing. The social work profession is not a group that comes first to the mind when thinking about environmental stewardship and advocacy. However, due to the centrality of health, wellbeing, justice and equality of social work practice and research, it is becoming clearer as to how well situated the profession is in order to help mend and repair that relationship.

Erickson (2018) discusses the four waves or movements of environmentalism (see also Jones, 2008), with the first wave starting in the late 1800s with men such as Henry David Thoreau and John Muir. The second wave was during the mid-1900s with the third wave beginning in the 1970s with the emergence of ecofeminism and further awareness of mainstream environmental preservation organisations. Currently, we find ourselves in the fourth wave of environmentalism. This wave is defined as being centred on diving deeper in to our understanding of human identity, lived experiences and rights of access, all within the context of

our relationship to nature. Environmental justice and sustainability are becoming central to discussions and hence the development of ecological social work (Besthorn, 2000), green social work (Dominelli, 2012) and an acceptance that the relationship humans have with nature, and with that, linkages to our identity, needs to be recognised and analysed as part of the fight against environmental degradation.

People's relationship to space and place are also linked to the stories we tell about ourselves and the world around us. When those spaces and places are altered, either gradually or suddenly, our sense of self and our sense of our environment also changes. It is with this in mind that this article hopes to describe why a wider and more integrated conversation about eco-grief is necessary within the field of social work, as well as in the wider lexicon of our experiences of climate change. It will do this by laying out a foundation section on the growing presence of green social work, bringing insight into biophilia and place attachment as could be related to eco-grief, and finally, what the role of the social work profession is in relation to recognising eco-grief as playing a role in individuals and communities' ability to respond to environmental degradation.

GREEN/ECO SOCIAL WORK

There has been a growing interest in expanding the traditional 'person-in-environment' concept that social work uses to analyse the social environment of an individual, to also include the natural and built environment. Specifically, there has been an upsurge in research and writing with a focus on the natural environment and the impact or role that it plays in the lives of people (Dominelli, 2012; Erickson, 2018; Willox, 2012; Narhi & Matthies, 2016; Crowther, 2018). This awareness, that social work was previously neglecting the physical and natural environment, has most notably resulted in social work practitioners and academics paying attention to issues surrounding sustainability and climate change (Narhi & Matthies, 2016). There is recognition that how social workers support individuals and communities after not only their experience of a natural disaster, but the less extreme changes in their environment as well, will become relevant. With that there is a belief, and little doubt, that climate change will impact not only on the physical, economic, socio-political landscapes that social workers are engaged in, but also on the type of work that will be needed to be carried out (Gray et al., 2013).

Dominelli and Ku (2017) suggest that 'greening' the profession is key to responding to 21st century challenges such as environmental degradation, extreme weather events, climate change migrants and land use issues. By including environmental justice and a social justice perspective on environmental issues,

the social work profession will not only be in a better place to be a key player in responding to the sustainable development goals and the Global Agenda for Social Work and Social Development (Jones & Truell, 2012), but also be in a position to promote and prioritise holistic practices that enhance the wellbeing of not only the people they work with, but the planet as well.

Linking the natural environment to social work practice began steadily in the 1970s with the simultaneous creation of systems theory and the eco-critical approach (Narhi & Matthies, 2016). Systems theory was developed as more thought was given to the biological and social systems that impacted on the lives of people using social work services. A growing awareness of the interdependence and interactions of various components of those social systems emerged as a central theory within social work practice (Narhi & Matthies, 2016). Although criticisms of a systems theoretical approach have since been plentiful as it ignores the physical environment, nature and the interdependent relationships human beings have with those systems (Gray et al., 2013; Coates & Gray, 2012; Besthorn, 2012; Dominelli, 2012), it did bring awareness about the role holistic and systemic thinking play when promoting overall human wellbeing. The development of systems theory coincided with the emerging awareness of ecological crises and an increased sense that the relationship between the environment and humans is a political relationship as well. Narhi and Matthies (2001) labelled the growing ecological movements and criticisms of industrialised society in Western countries of the 1970s and 1980s, as an eco-critical approach.

The eco-critical approach, which is characterised by ensuring that the natural environment is included as a system, that humans are dependent on nature and yet situated within a crisis of industrialisation and the impact that has on Earth's resources, and promotes social change and political movements, was the beginning of various conceptualisations of how to incorporate the environment into social work practice. Ecosocial, ecological, green and environmental social work have all been used, interchangeably, in various social work contexts to explain the combination of social and ecological perspectives (Besthorn, 2003; Dominelli, 2012; Coates & Gray, 2012; Gray et al., 2013; Närhi & Matthies, 2001, 2014; Mary, 2008; Molyneux, 2010; Norton, 2012; Peeters, 2012). What can be agreed upon amongst all these perspectives is that there is a global discussion being conducted that involves a critical reflection on Western social work practice and the importance of integrating indigenous worldviews, environmental justice is being seen as a pressing issue, there is a redefining of what human wellbeing means, and a need to promote sustainability in multidimensional practice.

Overall then, as concepts such as ecological/environmental justice and sustainability enter the lexicon of social work practice, more and more social

work academics and practitioners are able to see the role they can play in responding to environmental degradation. As will be discussed in the remainder of this paper, as social work practice involves sitting at the intersection of promoting healthy relationships, whether they be between people, systems or in this case, the natural environment, there are some specific areas that I argue need to be recognised in order to support sustainable living.

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WHY DO WE CARE?

First developed by E. O. Wilson (1993), biophilia is the recognition that there is a fundamental, genetically based human need to affiliate with life or "the innately emotional affiliation of human beings to other living organisms" (p.31). For as long as humans have been evolving, they have lived side by side, intimately connected with the environment. We cannot survive without food, water or sunlight, and we often adjust our schedules and activities in line with the seasonal changes. Biophilia is the response, usually positive, and attraction to certain aspects of nature which could aid our survival; it is the theory that asserts we have become physiologically and psychologically adapted, through evolution, to particular types of natural settings (Besthorn & Saleebey, 2003). Biophilia can also be linked towards more modern associations, such as why we are likely to be attracted to advertising that incorporates scenes of nature, possibly recognising that these scenes are linked towards our broader human fulfilment. The concept has been looked at from a variety of disciplines and therefore, provides numerous insights into human relationships and connections with nature (Frumkin, 2001; Kahn & Kellert, 2002; Kellert, 1997). The Biophilia theory provides evidence as to why people, although not guaranteed especially for those who have had a negative experience with or in nature, prefer natural environments to built environments, and also how nature can be linked to stress recovery and other aspects of emotions, behaviour, wellbeing and cognition (Williams, 2017; McGeeny, 2016; Kellert & Wilson, 1993; Ulrich, 1984; Buzzell & Chalquist, 2009; Crowther, 2018). All that being said, what is important to recognise and acknowledge, is the deep emotional and biological need of connecting to the natural environment that is present in order for humans to survive.

Recognising that biophilia played, and continues to play, a key role in our evolution and adaptation helps to explain why neighbourhoods are perceived as safer when they are in proximity to trees and parks, why natural spaces that resemble the Savanna are cross-culturally valued, and how there is an association between the necessities of food and water and preferences for proximity to vegetation (Kaplan, 1983; Besthorn & Saleebey, 2003; Ulrich, 1993). Considering that spending time in nature can provide an escape from the noise, stresses and excessive stimulation of modern day life (Besthorn & Saleeby, 2003; Herzog & Bosley, 1992), it is no wonder then that by removing, or not acknowledging that biophilic connection, could produce feelings of irritability, anxiety, and even grief when these connections are not nurtured or even severed. In fact, Kellert (1997) postulated that the intimacy people can feel with nature is so vital that it fulfils certain needs that provide the emotional strength and resilience to confront life's stressors. If we consider that the biophilia hypothesis suggests our very identity is linked to our relationships with the natural environment, one can only propose that the further we retreat away from nature, the further we retreat from ourselves.

An added complexity to the previous argument is reflecting on the role technology has played in this relationship between human and nature. Technology has developed in a way that often causes us to be disconnected from nature (Louv, 2005) or in a way that produces technological nature (Kahn, Severson & Ruckert, 2009) and can be used as a tool to reconnect individuals with nature (Buettel & Brook, 2016). There are strong arguments on both sides of the technological debate, however, neither would deny the importance of individuals having a strong affiliation or connection to nature and the role that plays in their wellbeing. In fact, Perkins (2010) has written about the significance of emotions for environmental altruism, which makes for a strong link towards how an individual's affinity for life affects their ability to interact with nature. The emotion of caring can be linked to environmental ethics as well as influencing the ability to act in the interest of nature (Seamon, 1984; Orr, 1993). By recognising that there are strong feelings associated with a person's relationship with the Earth (Seamon, 1984), allows for awareness as to how best to foster a sense of connectedness. Considering environmental ethics, from the standpoint that the emotions of love, awe and wonder are so strongly associated with them (Klinger, 1998; Perkins, 2010), will also provide weight as to the potential prevalence of grief towards the environment when there is significant disruption or change to the natural landscape. Environmental philosophers have proposed at length that direct experiences with nature can often have profound emotional effects on people (Perkins, 2010) and it is only natural to conclude then that a significant loss would also elicit an emotional effect.

ECO GRIEF AND PLACE ATTACHMENT

Grief and mourning are often perceived as private experiences and responses to loss, yet there is also the possibility of a shared response in how grief can be manifested. Rituals, memorials and vigils are often present when individuals are grieving or mourning the loss of someone. What is significantly less common is for these responses and manifestations to be present when an aspect of the natural world is lost. Yet, according to recent research by Willox (2012) and others (Lysack, 2010; Norgaard & Reed, 2017; Albrecht et al., 2007), experiences of eco grief are ever present within individuals and communities that suffer from a sense of environmental loss.

Willox (2012) goes into great detail about the lack of environmentally based entities lacking from the mourning literature, reflecting on the anthropocentric nature of mourning and grief discourse and how this gap is doing a great disservice in giving credit to the deep emotions we feel when our favourite tree is cut down, or cherished childhood water hole dries up. Her work with some of the northern communities of Canada has led to an increased awareness and understanding of all the different ways that eco-grief can be felt and experienced (Willox, 2012; Cunsolo Willox et al., 2012; Cunsolo Willox et al., 2013; Cunsolo Willox et al., 2015). What perhaps is also important to talk about is the idea of place attachment and how that could be considered one concept that is at the root of our deep felt emotions around eco-grief.

Lewicka (2011b) has identified a growing body of literature over the past three decades from social sciences, humanities, geography, architecture and psychology. Place attachment represents the emotional link that is formed between an individual and a physical site that has been given meaning through interactions that individual has had with that site (Milligan, 1998; Devine-Wright, 2013; Lewicka, 2011a; Cresswell, 2004; Bonaiuto et al., 2016). Places often have abundant associations and are saturated with sentimentality. The meaningfulness of the activities that have occurred at the site, the specific features of the site shape and the link that this place has towards an individual's identity formation will all play a role in how strong the attachment is. Place attachment provides a sense of security and wellbeing and can anchor or categorise memories against the passage of time (Anguelovski, 2013). What many authors agree on is that place is a way of being, seeing, knowing and understanding the world (Cresswell, 2004; Devine-Wright, 2013; Bonaiuto et al., 2016).

For place attachment to be present, there needs to be two types of interactions or components: the interactional past and the interactional potential of a site (Milligan, 1998). The interactional past is what has been described as above. A physical site has become a meaningful place due to the interactions and layers of experiences and meanings that an individual or community has imbued on it.

This is directly linked then to the interactional potential of a site. Eventually, there comes unconscious or conscious association with the type of activity that will happen in that place in the future. There is perhaps a confident anticipation as to what new memories could be formed there over time. Alternatively, Scannell and Gifford (2010) also propose that place attachment be characterised by three interrelated dimensions: Person, psychological processes and place. Person can represent an individual or a collective; psychological processes will be associated with cognitive, affective and behavioural components and the place will not only mean the physical place, but also the social environment and meanings attributed to that place.

On a community level, as people strongly associate their identity with their neighbourhood attachment (Anguelovski, 2013), the attachment with place will also be directly related to the attachment people have with other members of their community. A sense of familiarity and closeness will be associated with various social interactions and who is involved in those social interactions. In other words, who we know is directly linked with where we know them from and our relationships with both place and person could be a complex web of interactions and associations. It becomes easier to see now, how the loss and rupture of these various levels of attachments through climate change, whether through a gradual process or a catastrophic event, would lead to feelings of loss and grief on both an individual and community level.

What also needs to be considered here, however, is the population of people who consider themselves more mobile and perhaps do not identify as strongly with place attachment as those that have lived in an area for a certain amount of time. Lewicka (2011) defines this group as having 'placelessness', which is likely to have a high degree of non-territorial identity. Identity related to family, interests, religion, cultural capital and education were all seen as factors that were more important to these individuals than place. The intricacies of the different types of place attachment that Lewicka (2011) has labelled are out with this article; however, it is an important dimension to any discipline to consider when thinking about the different ways that climate change affects our relationship with place.

So what does this mean for a deeper understanding of eco-grief and the role that plays in how we combat climate change and environmental degradation? When thinking about attachment in a more traditional way, that is using a Bowlby (1969) lens, the definition of a secure attachment that includes physical proximity, a safe haven, secure base and distress when separated, can all be applied to place attachment for an individual or a community. The emotions that are experienced when away from a human secure base and safe haven, have been found to be experienced in a similar situation when people are separated from their usual living space (Fried, 1963; Bonaiuto et al., 2016). In other words, the relationship that

one would have with a natural space and those bonds of attachment would be broken (Lysack, 2010). Biophilia and place attachment both agree on the centrality of this relationship, and whether it is a conscious or unconscious awareness, climate change is disrupting that relationship. There could even be an increase of individuals and communities having negative relationships with the earth as instances of natural disasters take away their livelihood or community. This is one of the paradoxes, and complications, with recognising and processing eco-grief. According to biophilia, we are innately connected to all aspects of the natural world; however, now that climate change has begun to impact our lives, there may be a sense of fear of the natural world which overrides the ability to recognise that innate need. The internal working model, a key component to emotional regulation and attachment development (Bowlby, 1969), will no longer expect the natural environment to act as a place of safety and comfort, but as a place of danger, anxiety and instability as the climate destabilises (Lysack, 2010). The potential for maladaptive coping with environmental degradation is increased then as there are complex emotions and perceptions at play. As ecological decline becomes more familiar and every day, many have found it difficult to maintain those positive bonds and drift into denial or resigned passivity (Lysack, 2010).

Grief is a display of our connection to something, and in the case of the natural environment, there is not only the grief that could be associated with honouring the relationships and the potential deep feelings associated with the loss of those spaces, but also the anticipatory grief felt knowing that there are more extreme weather related events anticipated for the future (IPCC, 2018). Albrecht et al. (2007) discuss the concept of solastalgia, the idea that there is distress produced by environmental change, often exacerbated by feelings of powerlessness or a lack of control. Their research in Australia demonstrates that the dominant components of solastalgia are the loss of ecosystem health and sense of place, threats to personal health and wellbeing and a sense of injustice and/or powerlessness. Although they do not specifically include grief within their definition, it would not be difficult to include eco-grief as a symptom in order to increase the language and awareness of what could be an experience for people living with ecosystem stressors. Environmental change can create distressed environments for and occupied by distressed people; therefore, it is essential to think broadly about how that impacts human physical and mental health and wellbeing.

When thinking about eco-grief and the potential impact this could have on an individual's ability to engage with sustainable living, if that is the desired outcome, it is important to think about not only what is the primary loss they have experienced, but how that could trigger another loss and as such results in a 'magnification of grief' (Stroebe & Schut, 1999: 210). In fact, the secondary loss may be of more pressing value to a family or individual, or easier to label

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or identify as a stressor. It would be up to the individual, family or community to identify what the primary loss would be. For some it could be the loss of landscape, for others it could be loss of income as a result of their livelihood being dependent on the natural environment. The two categories of stressors would require different coping mechanisms and displays of grief. As a profession that regularly deals with loss or grief in a variety of forms, this is where social work could play a role.

WHAT THIS MEANS FOR SOCIAL WORK PRACTICE

What is becoming clear is that eco-grief has the potential to impact more members of the population than any of us are aware. As the climate continues to change and alter, this number could grow to not only include individuals whose identity is closely linked to the natural environment (CBC, 2018), but anyone that a social worker comes in contact with. As such, social workers are in a unique position to respond to climate change and the various ways that it impacts on individuals and community's health and wellbeing.

Social workers are known for the ability to work within the context of relationships, whether that is between humans and humans, humans and organisations, and now humans and the natural environment. This is broadening out the view that climate change is a social justice issue and that is why social workers should get involved with the climate change discourse. This is recognising that climate change is currently, or will in the future, affect individuals and communities in a variety of ways, that this is a relationship that social workers need to be more comfortable working with. Therefore, in order to strengthen our relationship to nature, in order to recognise its importance to our wellbeing, we also need to be able to discuss any of the feelings of disconnect and grief that could be present.

Working within the context of grief involves coming to terms with the loss of someone of something, and there are a wide variety of theories and models that professionals and individuals can apply to the process of bereavement (see Stroebe & Schut, 1999 for an overview). However, the one that seems most appropriate and could be applied to the experience of eco-grief would be the Dual Process Model (Stroebe & Shut, 1999). Stroebe and Shut (1999) recognise that

this model has not yet been applied to other types of bereavement in addition to the loss of a close person; however, the scope for it to be a theoretical base for the eco-grief context is one to be explored further. The model recognises that there are different stressors that need to be coped with when experiencing a loss. Specifically, there is loss-and restoration-oriented coping mechanisms that an individual will go through. Loss-orientation refers to concentrating on and dealing with or processing an aspect of the loss experience itself. Within an ecological context, this could mean focussing on the loss of an aspect of the natural world, yearning for the way it used to be, looking at photos or videos and being emotional about the situation. There is a focus on the nature and closeness of the bond and how to have a continued relationship with what is lost. The second type, restoration-orientation involves focusing on what needs to be dealt with and how to deal with it. There is not necessarily a set outcome to this process, but it is recognising that there are secondary stressors that have emerged as a result of the loss that also need attention. This could be focusing on another source of income, rebuilding, becoming more environmentally aware and changing habits to be more sustainable, a myriad of reactions and emotions could be involved here.

Ensuring there is awareness that an individual, family or community will not be grieving all of the time is a central component to this model. At times there will be taking time off from grieving or denial and the authors recognise that this is a healthy dynamic to go through as grieving consistently or ruminating excessively can greatly affect someone's mental health. Stroebe and Shut (1999) believe that it is fundamental to oscillate between the two modes of coping in order to successfully cope with the loss. Over time, compartmentalising and working through the various tasks and emotions that need to be addressed is integral to no longer needing or thinking about certain aspects of the loss. There are still many aspects of this model that need to be further researched in terms of gender differences, complicated grief and cultural contexts, however as stated above, the potential for the model to be utilised by professionals and individuals experiencing eco-grief is apparent. One aspect of the restoration-orientation process of this model that could be especially interesting to examine would be using that aspect of coping to rebuild a relationship with the earth in order to promote sustainable living habits and awareness about how to combat ecological deterioration.

The process of working with this relationship could also potentially involve some ecological or environmental identity work with not only people that social workers work with, but also amongst themselves, and possibly the profession as a whole. Developing an ecological identity requires reflecting on our personality, actions and sense of self in relation to our relationship to nature (Thomashow, 1996). This may not be an easy process, and could bring up tensions around politics, faith, personhood and other identity markers, however navigating this process

is an integral component to naming the reasons why someone may, or may not be involved in responding to environmental degradation. Stets and Biga (2003) describe a variety of ways that environmental identity reflect on an individual's ability to maintain a pro-environmental attitude and behaviour. The stronger the environmental identity and an individual's commitment to engaging with this aspect of the identity prominently, the more will be the likelihood of safeguarding behaviours towards the environment. This reinforces Bragg (1996) writings on the ecological self and the crucial role this plays in developing individual and collective relationships with the natural world and to increase our ability to act in an environmentally responsible way.

With technological advancement, globalisation, neoliberalism and materialism playing central roles in the majority of developed nations' societal goals, these will impact heavily on the aspect of self that aligns closest with them.

With this work being done on the importance of developing an ecological or environmental identity, there is also a need to contemplate whether any number of the wider population is going through what could be defined as an 'ecological identity crisis'. When experiencing an 'identity crisis', there is often a feeling of being lost in the world, not being able to connect meaningfully to objects, people, ideas or systems, typical sources of how we understand our identity and how we understood we are seen by others (Thomashow, 1996). The self, and therefore, identity is a primary motivator of behaviour and will provide a framework for individuals to organise and manage their thoughts, feelings and perceptions (Stets & Biga, 2003). Consequently, if an individual is not defining one's self or locating one's identity in the natural world or using the direct experience of nature as a framework for personal decisions, professional choices, political action and spiritual inquiry, it would not be too far then to think about how some may be experiencing an 'ecological' identity crisis. According to the biophilia and environmental sociology literature, these connections and experiences are integral to our humanity; however, as we have competing identities that must be navigated and arranged in a hierarchy (Stets & Biga, 2003), there is the possibility that the ecological identity has been pushed to the bottom of the list and got lost amongst how one wants to reflect their ideal self. The more prominent identity will get more support from others, be committed to and be rewarded both intrinsically and extrinsically. With technological advancement, globalisation, neoliberalism and materialism

playing central roles in the majority of developed nations' societal goals, these will impact heavily on the aspect of self that aligns closest with them. As such, the possibility to inspire individuals to connect meaningfully with nature diminishes as urbanisation spreads and climate change results in the potential loss of species and spaces; there is then a growing need for individuals to assess their identity in the context of the natural world.

Louv (2005) discusses another angle of this potential identity crisis and has created the label 'nature deficit disorder' in relation to children spending less time outside than previous generations and how this is effecting their overall development and wellbeing. Although Louv (2005) continues to emphasise this concept, it seems to be pertinent to eventually think of an approach, and subsequent mode of intervention, that combines both the notions of 'ecological identity crisis' and 'nature deficit disorder' in order to add to the conversation about how we develop best practice in order to combat ecological destruction.

The strengths-based perspective (Saleeby, 1996), a core concept in social work practice, could be integral to beginning the process of developing a new approach. Strengths-based practice is a collaborative way or working that involves the person, or community, to be supported, and the worker or organisation facilitating the support. It emphasises a strong relationship between all those involved and relies on identifying the strengths the individual or community already has in order to identify a plan of working together. Strengths are not only labelled in regard to individual characteristics and resources, but also in the strength of networks and social capital. Within the context of the natural environment, this would involve working towards recognising when the environment has had a positive effect, and identifying the benefits that have been received. This could also involve identifying strengths that are situated within the natural environment and how that benefits an ecosystem, and then relating that to an individual or a community about the roles that different organisms have in order to promote sustainable living and partnership. Establishing the assets the Earth provides and has a role in playing in the health of individuals, communities, families and organisations could prove to be a powerful tool in order to eventually lead to positive behaviour change (Erickson, 2018).

The strategy to work from a strengths-based perspective would also revolve around bringing these discussions to light in order to showcase the impact of spending time in nature and how this could also contribute to strengthening the positive attachment that individuals have to nature. The previous discussion on place attachment allowed us to see how this is an important component to individuals believing they are in a place of safety, another key desired outcome of mainstream social work practice.

As part of this healing agenda however, social workers themselves will also

have to partake in some critical reflection on their own experiences of eco-grief and place attachment. Throughout social work practice, there is an emphasis on reflection and self-awareness (Trevithick, 2004). It is believed that this is an integral component to practice and it helps practitioners become more aware of their biases and the impact of heightened emotional situations on their own wellbeing and ability to conduct themselves professionally. Often using one of the most pivotal frameworks for reflection, Schon's (1991) framework on reflection-on-action and reflection-in-action, social workers are able to learn from and by experience in an effective manner (Knott & Scragg, 2007). Social workers then have the tools to evaluate and identify their own role in the degradation of the environment, their individual perceptions of physical place and the various ways biophilia shows up in their day to day lives. Reflecting back on engaging in experiences with the natural world will likely be the first step that social workers take in order to transform that experience into knowledge and understanding. Focusing on the emotions that were present are also an important element to the reflective process in order to ascertain and identify what was it about that experience that made it memorable. Reflecting while engaging with, or in action is often described as the more important form of reflection (Knott & Scragg, 2007). This is the type of reflection that develops intuition and supports working in uncertainty (Knott & Scragg, 2007) and is an essential component to developing one's ecological self. If a social worker was working directly with a service user utilising a green social work perspective, reflecting while conducting the work, could provide both an increased sense of ecological self for the practitioner, as well as being more attuned to the service user's needs. Therefore, allowing for both individuals to be impacted by the natural environment in a positive way that could increase their capacity to protect and repair their relationship with the Earth.

CONCLUSION

This has been a brief insight into ways that social work can further develop an environmental healing agenda and connect to not only the natural environment but also individuals, families and communities in a way that fosters a collective response to environmental depletion and degradation. There are still many aspects of this conversation that need to be researched and further understood. Marginalised and vulnerable populations, those at most risk of being the first to suffer the consequences of climate change and potentially those who are also at risk of suffering eco-grief are groups that need to be involved in all aspects of the conversation and work to combat climate change. Future studies are needed about people's relationship to place and natural space and how this not only affects

their identity about their willingness to engage in combating environmental degradation and social responses to a changing environment, but also how they experience any potential grief or bereavement, especially with those populations that are integral to promoting resilience and creative methods of sustainable living. Studies such as those done with community gardens are beginning to widen this discussion in relation to environmental justice and the importance of community resiliency (Erickson, 2018). Providing green space has fostered deeper relationships with both people and the land and as a result has strengthened social cohesion (Erickson, 2018). This green space has then proven to be a protective factor and been a key factor in the process of building resilience for this community. Continuing research in this area will strengthen the evidence base that is needed to support sustainable change in behaviour and understanding about the various ways the natural world and individuals, families and communities rely on each other.

By carefully facilitating discussions and acknowledging those feelings of grief, despair and hopelessness, social workers are in a position to support individuals in finding a sense of wanting to change current behaviour or advocate for better sustainable and environmental policies and practices.

Eco-social work uses social and ecological ideas in promoting the well-being of all, particularly through community practice. A widening of the theoretical and practice base to ensure that social and environmental justice are considered integral to any environmental involvement by social workers is still needed. Social work academics and practitioners can play a key role in ensuring further work and investigation on the impact of climate change on mental health and what this means for our wellbeing. Being mindful that there could be groups, or times, where people experience ecological fatigue, and how this could result in disconnecting to the environment, or not wanting to engage would be important. However, by carefully facilitating discussions and acknowledging those feelings of grief, despair and hopelessness, social workers are in a position to support individuals in finding a sense of wanting to change current behaviour or advocate for better sustainable and environmental policies and practices. Responding to environmental degradation is a collective responsibility that will involve professions expanding their knowledge and practice base. The task now is to continue to research and develop these areas of practice in order to provide further empirical evidence to support this.

REFERENCES

Albrecht, G. et al., 'Solastalgia: The Distress Caused by Environmental Change', *Australasian Psychiatry*, 15, 2007, pp.95-98 (Albrecht et al., 2007)

Anguelovski, I., 'From Environmental Trauma to Safe Haven: Place Attachment and Place Remaking in Three Marginalized Neighborhoods of Barcelona, Boston, and Havana', *City and Community*, Vol. 12, No. 3, 2013, pp.211-237 (Anguelovski, 2013)

Besthorn, F. H. & D. Saleebey, 'Nature, Genetics, and the Biophilia Connection: Exploring Linkages with Social Work Values and Practice', *Advances in Social Work*, Vol. 4, No. 1, 2003, pp.1-18 (Besthorn & Saleebey, 2003)

Besthorn, F. H., 'Deep Ecology's Contributions to Social Work: A Ten-Year Retrospective', *International Journal of Social Welfare*, Vol. 21, No. 3, 2012, pp.248-259 (Besthorn, 2012)

Besthorn, F. H., 'Radical Ecologisms: Insights for Educating Social Workers in Ecological Activism and Social Justice', *Critical Social Work*, Vol. 3, No. 1, 2003, pp.66-106 (Besthorn, 2003)

Besthorn, F. H., 'Toward A Deep-Ecological Social Work: Its Environmental, Spiritual and Political Dimensions', *Spirituality and Social Work Forum,* Vol. 7, No. 2, 2000, pp.2-7 (Besthorn, 2000)

Bonaiuto, M. et al., 'Place Attachment and Natural Environmental Risk: Research Review and Agenda', *Journal of Environmental Psychology*, 48, 2016, pp.33-53 (Bonaiuto et al., 2016)

Bowlby, J., *Attachment and Loss: Vol. 1. Attachment*, New York, Basic Books, 1969 (Bowlby, I969)

Bragg, E. A., 'Towards Ecological Self: Deep Ecology Meets Constructionist Self-Theory', *Journal of Environmental Psychology*, Vol. 16, No. 2, 1996, pp.93-108 (Bragg, 1996)

Buettel, J. C. & B. W. Brook, 'Egress! How Technophilia Can Reinforce Biophilia to Improve Ecological Restoration', *Restoration Ecology*, Vol. 24, No. 6, 2016, pp.843-847 (Buettel & Brook, 2016)

Buzzell L. & C. Chalquist (eds.), *Ecotherapy: Healing with Nature in Mind*, San Francisco, Sierra Club Books, 2009 (Buzzell & Chalquist, 2009)

Canadian Wildland Fire Information System, 'Natural Resources Canada', retrieved on 21 August 2018 from http://cwfis.cfs.nrcan.gc.ca/report/

CBC, *Growing 'ecological grief' is the mental health cost of climate change*, CBC Radio (online), retrieved on 21 October 2018 from https://www.cbc.ca/radio/checkup/growing-ecological-grief-is-the-mental-health-cost-of-climate-change-1.4871666

Coates, J. & M. Gray, 'The Environment and Social Work: An Overview and Introduction', *International Journal of Social Welfare*, 21, 2012, pp.230-238 (Coates & Gray, 2012)

Cresswell, T., *Place: A Short Introduction*, London, Wiley-Blackwell, 2004 (Cresswell, 2004)

Crowther, R., *Wellbeing and Self-Transformation in Natural Landscapes*, Cham, Palgrave Macmillan, 2018 (Crowther, 2018)

Cunsolo Willox, A. et al., 'Examining Relationships between Climate Change and Mental Health in the Circumpolar North', *Regional Environmental Change*, 15, 2015, pp.169-182 (Cunsolo Willox et al., 2015)

Cunsolo Willox, A. et al., "'From this place and of this place': Climate Change, Sense of Place,

and Health in Nunatsiavut, Canada", *Social Science and Medicine*, 75, 2012, pp.538-547 (Cunsolo Willox et al., 2012)

Cunsolo Willox, A. et al., 'The Land Enriches the Soul: On Climatic and Environmental Change, Affect, and Emotional Health and Well-Being in Rigolet, Nunatsiavut, Canada', *Emotion, Space and Society*, 6, 2013, pp.14-24 (Cunsolo Willox et al., 2013)

Cunsolo Willox, A. et al., 'Examining Relationships between Climate Change and Mental Health in the Circumpolar North', *Regional Environmental Change*, 15, 2015, pp.169-182 (Cunsolo Willox et al., 2015)

Devine-Wright, P., 'Think Global, Act Local? The Relevance of Place Attachments and Place Identities in a Climate Changed World', *Global Environmental Change*, 23, 2013, pp.61-69 (Devine-Wright, 2013)

Dominelli, L., *Green Social Work: From Environmental Crises to Environmental Justice*, Cambrdige, Polity Press, 2012 (Dominelli, 2012)

Dominelli, L. & H. B. Ku, 'Green Social Work and its Implications for Social Development in China', *China Journal of Social Work*, Vol. 10, No. 1, pp.2-3

Erickson, C. L., *Environmental Justice as Social Work Practice*, New York, Oxford University Press, 2018 (Erickson, 2018)

Fried, M., 'Grieving For a Lost Home', in L. J. Duhl (ed.), *The Urban Condition*, New York, Basic Books, 1963, pp.151-171 (Fried, 1963)

Frumkin, H., 'Beyond Toxicity: Human Health and the Natural Environment', *American Journal of Preventive Medicine*, Vol. 20, No. 3, 2001, pp.234-240 (Frumkin, 2001)

Gray, M, J. Cotes & T. Hetherington, 'Introduction: Overview of the Last Ten Years and Typology of ESW', in Gray, M, J. Coates & T. Hetherington (eds.), *Environmental Social Work*, London, Routledge, 2013, pp.1-29 (Gray et al., 2013)

Herzog, T. R. & P. J. Bosley, 'Tranquillity and Preference as Affective Qualities of Natural Environments', *Journal of Environmental Psychology*, 12, 1992, pp.115-127 (Herzog & Bosley, 1992)

Intergovernmental Panel on Climate Change (IPCC), retrieved on 25 October 2018 from http://www.ipcc.ch/ (IPCC, 2018)

Jones, V., *The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems*, New York, Harper One, 2008 (Jones, 2008)

Jones, D. N. & R. Truell, 'The Global Agenda for Social Work and Social Development: A Place to Link together and be Effective in a Globalized World', *International Social Work*, 55, 2002, pp.454-472 (Jones & Truell, 2012)

Kahn, P. H. & S. R. Kellert, (eds.), *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*, Cambridge, MIT Press, 2002 (Kahn & Kellert, 2002)

Kahn, P. H., R. L. Severson & J. H. Ruckert, 'The Human Relation with Nature and Technological Nature', *Current Directions in Psychological Science*, Vol. 18, No. 2, 2009, pp.37-42 (Kahn, Severson & Ruckert, 2009)

Kaplan, R., 'The Role of Nature in the Urban Context' in Altman, I. & J. Wohlwill (eds.), *Behaviour and the Natural Environment*, New York, Plenum Press, 1983 (Kaplan, 1983)

Kellert, S. R., *Kinship Tomastery: Biophilia in Human Evolution and Development*, Washington DC, Island Press, 1997 (Kellert, 1997)

Kellert, S. R. & E. O. Wilson (eds.), *The Biophilia Hypothesis,* Washington DC, Island Press, 1993 (Kellert & Wilson, 1993)

Klinger, E., 'The Search for Meaning in Evolutionary Perspective and its Clinical Implications' in Wong, P. T. P. & P. S. Fry (eds.), *The Human Quest for Meaning: A Handbook of Psychological Research and Clinical Applications*, Mahwah, Lawrence Erlbaum Associates, 1998, pp.27-50 (Klinger, 1998)

Knott, C. & T. Scragg (eds.), *Reflective Practice in Social Work*, Exeter, Learning Matters, 2007 (Knott & Scragg, 2007)

Lewicka, M., 'On the Varieties of People's Relationships with Places: Hummon's Typology Revisited', *Environment and Behavior*, Vol. 43, No. 5, 2011, pp.676-709 (Lewicka, 2011b)

Lewicka, M., 'Place Attachment: How Far Have We Come in the Last 40 Years?', *Journal of Environmental Psychology*, 31, 2011, pp.207-230 (Lewicka, 2011a)

Louv, R., *The Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder*, New York, Algonquin Books, 2005 (Louv, 2005)

Lysack, M., 'Critical Social Work Environmental Decline, Loss, and Biophilia: Fostering Commitment in Environmental Citizenship', *Critical Social Work*, Vol. 11, No.3, 2010, pp.48-66 (Lysack, 2010)

Mary, N., *Social Work in a Sustainable World*, Chicago, Lyceum Books, 2008 (Mary, 2008)

McGeeny, A., *With Nature in Mind: The Ecotherapy Manual for Mental Health Professionals*, London, Jessica Kingsley, 2016 (McGeeny, 2016)

Milligan, M. J., 'Interactional Past and Potential: The Social Construction of Place Attachment', *Symbolic Interaction*, Vol. 21, No. 1, 1998, pp.1-33 (Milligan, 1998)

Molyneux, R., 'The Practical Realities of Ecosocial Work: Review of the Literature', *Critical Social Work*, Vol. 11, No. 2, 2010, pp.1-8 (Molyneux, 2010)

Narhi K. & A. Matthies, 'Conceptual and Historical Analysis of Ecological Social Work' in Mckinnon, J. & M. Alston (eds.), *Ecological Social Work: Towards Sustainability*, London, Palgrave Macmilan, 2016, pp.21-39 (Narhi & Matthies, 2016)

Norgaard, K. M. & R. Reed, 'Emotional Impacts of Environmental Decline: What Can Native Cosmologies Teach Sociology about Emotions and Environmental Justice?', *Theory and Society*, 46, 2017, pp.463-495 (Norgaard & Reed, 2017)

Norton, C. L., 'Social Work and the Environment: An Ecosocial Approach', *International Journal of Social Welfare*, 21, 2012, pp.299-308 (Norton, 2012)

Orr, D. W., 'Love It or Lose It: The Coming Biophilia Revolution', in Kellert, S. R. & E. O. Wilson (eds.), *The Biophilia Hypothesis*, New York, Island Press, 1993, pp.415-440 (Orr, 1993)

Peeters, J., 'Social Work and Sustainable Development: Towards a Social Ecological Practice Model', *Journal of Social Intervention: Theory and Practice*, Vol. 21, No. 3, 2012, pp.5-26 (Peeters, 2012)

Perkins, H. E., 'Measuring Love and Care for Nature', *Journal of Environmental Psychology*, 30, 2010, pp.455-463 (Perkins, 2010)

Saleebey, D., 'The Strengths Perspective in Social Work Practice: Extensions and Cautions', *Social Work*, Vol. 41, No. 3, 1996, pp.296-305

Scannell, L. & R. Gifford, 'The Relations between Natural and Civic Place Attachment and

Pro-Environmental Behavior', *Journal of Environmental Psychology*, 30, 2010, pp.289-297, retrieved from http://dx.doi.org/10.1016/j.jenvp.2010.01.010

Schon, D., *The Reflective Practitioner: How Professionals Think in Action*, Aldershot, Ashgate, 1991 (Schon, 1991)

Seamon, D., 'Emotional Experience of the Environment', *The American Behavioral Scientist*, Vol. 27, No. 6, 1984, pp.757-770 (Seamon, 1984)

Stets, J. E. & C. F. Biga, 'Bringing Identity Theory into Environmental Sociology', *Sociological Theory*, Vol. 21, No. 4, 2003, pp.17-20 retrieved from http://www.ncbi.nlm.nih.gov/pubmed/22966966\nhttp://dx.doi.org/10.1016/j.appet.2013.03.006 (Stets & Biga, 2003)

Stroebe, M. & H. Schut, 'The Dual Process Model of Coping with Bereavement: Rationale and Description', *Death Studies*, Vol. 23, No. 3, 1999, pp.197-224 (Stroebe & Schut, 1999)

Thomashow, M., *Ecological Identity: Becoming a Reflective Environmentalist*, Cambridge, MIT Press, 1996 (Thomashow, 1996)

Trevithick, P., *Social Work Skills: A Practice Handbook*, Maidenhead, Open University Press, 2004 (Trevithick, 2004)

Ulrich, R. S., 'Biophilia, Biophobia, and Natural Landscapes', in Kellert, S. R. & E. O. Wilson (eds.), *The Biophilia Hypothesis*, Washington DC, Island Press, 1993, pp.73-137 (Ulrich, 1993)

Ulrich, R., 'View through A Window May Influence Recovery from Surgery', *Science*, 224 1984, pp.420-421 (Ulrich, 1984)

Williams, F., *The Nature Fix*, New York, W. W. Norton & Company, 2017 (Williams, 2017)

Wilson, E. O., 'Biophilia and the Conservation Ethic', in Kellert, S. R. & E. O. Wilson, (eds.), *The Biophilia Hypothesis*, Washington DC, Island Press, 1993, pp.31-42 (Wilson, 1993)

Willox, A., 'Climate Change as the Work of Mourning', *Ethics and the Environment*, Vol. 17, No. 2, 2012, pp.137-189 (Willox, 2012)